ABSTRACT

Coupling circuitry implemented with passive components is added to a conventional power supply to enable communications access to a power-line network by a device designed for power-line communications ("PLC device"), in order to achieve certain benefits including minimizing costs.

Conventional PLC devices access the power-line network via coupling circuitry built into the PLC device and a separate cable that connects the PLC device to a power outlet. With this invention the PLC device may use the coupling circuitry that is built into a host's existing power supply, thus providing at least two distinct advantages: 1) only one cable is necessary to connect the host device to the power-line network, and 2) the design of the PLC device is simplified since it is not connected to high-voltage line.